



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/694,659

10/28/2003

Masahiro Inomata

3140-017

3997

33432

7590

03/06/2006

KILYK & BOWERSOX, P.L.L.C.
400 HOLIDAY COURT
SUITE 102
WARRENTON, VA 20186

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,659

Applicant(s)

INOMATA, MASAHIRO

Examiner

Joshua L. Pritchett

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 16-19 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16-19 and 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Request for Continued Examination and Amendment filed January 17, 2006. Claims 1-11, 16-19 and 21-26 have been amended and claims 12-15 and 26 have been cancelled as requested by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 16-27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus (US 6,396,941) in view of Takagi (US 2003/0193025).

Regarding claims 1, 10 and 11, Bacus teaches a magnifying observation apparatus comprising a first observation condition setting section for setting first observation conditions for simply acquiring a plurality of observation images (Fig. 1A); a first observation image display for displaying a plurality of first observation images acquired per the plurality of first observation conditions set with the first observation condition setting section (col. 6 lines 42-45); a selection section for selecting a desired first observation image form among the plurality of first observation images displayed on the first observation image display section (Figs. 2-3; col. 6

Art Unit: 2872

lines 43-50); a second observation condition setting section enabling to set further observation conditions based on the first observation conditions set to the first observation image selected with the selection section (col. 3 lines 43-50); and a second observation image display section for displaying a second observation image acquired based on the observation conditions set with the observation conditions setting section (Figs. 2-3). Bacus further teaches photographing an observation image (col. 5 lines 10-17). Bacus lacks reference to simultaneously displaying images with different observation conditions. Takagi teaches the use of a displaying simultaneously different images obtained from different observation conditions on a display (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Bacus reference display different images with different observation conditions simultaneously for the purpose of comparing views of the same specimen at different angles and magnifications for the purpose of obtaining a more complete understanding of the specimen.

Regarding claim 2, Bacus teaches a first observation image acquisition section for acquiring first observation images per the plurality of first observation conditions set with the first observation condition setting section (Fig. 1A); a first observation image storage section for storing a plurality of first observation images acquired with the first observation image acquisition section (Fig. 1B); a second observation image acquisition section for acquiring a second observation image based on the observation conditions set with the observation condition setting section (col. 6 lines 42-45), wherein the first observation image display section displays the plurality of first observation images stored into the first observation image display section

Art Unit: 2872

and the observation image display section displays the observation image acquired with the observation image acquisition section (Figs. 2-3; col. 5 line 10 – col. 7 line 4).

Regarding claim 3, Bacus teaches the first observation image display section lists a plurality of first observation images (col. 6 lines 42-45).

Regarding claim 4, Bacus teaches the first observation image display section comprises a switch section for selectively displaying the plurality of first observation images (col. 6 lines 42-45).

Regarding claim 5, Bacus teaches an adjustment section for performing at least positioning and focusing on a second observation image displayed on the observation image display section before setting first observation conditions by the first observation condition setting section (col. 5 lines 40-48).

Regarding claim 6, Bacus teaches the first observation conditions set with the first observation condition setting section include illumination method (col. 18 lines 5-12) and brightness of an image (col. 18 lines 5-12).

Regarding claim 7, Bacus teaches the adjustment method is made by way of selecting between incident-light illumination and transmitting illumination as an illumination direction, selection between peripheral illumination and side illumination, and selection among a diffuser, a polarizer and a transmitted light without using filters as a filter for an illumination light (col. 18 lines 5-12).

Regarding claim 8, Bacus teaches control of the brightness of an image is done by at least one of control of the light quantity of the illumination, adjustment of the shutter speed of the imaging sections, gain control and control of white balance (col. 18 lines 5-12).

Regarding claim 9, Bacus teaches at least the characteristics of a second observation subject is set with the first observation condition setting section (col. 5 lines 40-50).

Regarding claims 16 and 17, Bacus teaches wherein the illumination means comprises illuminating parts, and wherein the first observation conditions comprise the condition that all parts of the illuminating parts are illuminated and/or the condition that one part of the illuminating part is illuminated (col. 17 lines 65-67).

Regarding claim 18, Bacus teaches the illumination means comprises a ring shaped illuminating part (174).

Regarding claim 21, Bacus teaches the first observation condition of the first observation condition setting means are set automatically (col. 3 lines 55-65).

Regarding claim 22, Bacus teaches the first observation condition of the first observation condition setting means are set arbitrarily (col. 3 lines 55-65). This claim limitation is inherent prior to or during the adjustment of the first observation settings. Further, arbitrary does not necessarily mean settings cannot be automatic therefore the automatic setting of Bacus could be arbitrary.

Regarding claim 23, Bacus teaches the first observation conditions comprise the condition of the incident light illuminating and the condition of a transmitting illumination (Fig. 9B and 10).

Regarding claim 24, Bacus teaches the first observation condition of a filter being present (Fig. 9B and 10). The claim limitation that a filter is "preferably a polarizer or a diffuser" does not limit the filter to either of those categories, therefore the neutral density filters of Bacus meet the claim limitations.

Regarding claim 25, Bacus teaches the invention as claimed but lacks reference to the first observation display section and the observation display section. The claimed relationship is achievable by a mere duplication of parts. It has been held that it is within the skill of one of ordinary skill in the art at the time the invention was made to perform a duplication of parts. In the instant case one would have been motivated to perform the duplication of parts for the purpose of easier manufacturing by being able to assemble the two sections at the same time separately and later insert them into the overall system at two different locations.

Regarding claim 26, Bacus teaches a menu for setting the first observation condition is displayed on the screen (Fig. 31).

Regarding claim 27, Bacus teaches varying the illumination conditions of the observation subject (Fig. 9B). The neutral density filters of Bacus would change the illumination conditions.

Regarding claim 30, Bacus teaches a display means for displaying a second observation image based on a signal acquired by the photographing means (Figs. 2 and 3).

Claims 19, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus (US 6,396,941) in view of Takagi (US 2003/0193025) as applied to claims 1, 10 and 27 above further in view of Fairley (US 2002/0118359).

Bacus in combination with Takagi teaches the invention as claimed but lacks reference to changing the illumination angle. Fairley teaches the use of a microscope with a means to switch the direction of illumination (Fig. 5). Fig. 5 shows laser (523) having an adjustable angle and thus having a plurality of different angles of illumination. It would have been obvious to one of

Art Unit: 2872

ordinary skill in the art at the time the invention was made to have the Bacus invention include an adjustable angle illuminating device as taught by Fairley for the purpose of providing the images obtained by Bacus some three-dimensional characteristics based on shading that would occur as the light moved across the surface of the observation subject.

Response to Arguments

Applicant's arguments, see Amendment, filed January 17, 2006, with respect to the rejection(s) of claim(s) 1, 10 and 11 under Bacus have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bacus in view of Takagi. Applicant argued that the Bacus reference failed to teach simultaneously displaying different images with different observation conditions. The Takagi reference teaches these limitations and has been added to the rejection above.

Applicant's arguments, see Amendment, filed January 19, 2006, with respect to claim objections have been fully considered and are persuasive. The objection of claims 1, 10 and 11 has been withdrawn. Applicant amended the claims to overcome the objections.

Conclusion

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP JP


DREW A. DUNN
SUPERVISORY PATENT EXAMINER